DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service
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DIVISION OF INDIAN HEALTH CIRCULAR NO. 61 - 7

HOSPITAL FLOOR MAINTENANCE

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1. PURPOSE AND SCOPE. This Manual Circular establishes floor maintenance procedures for Division of Indian Health hospitals.

2. DISCUSSION.

A. Ceramic tile requires no special surface treatment - only a thorough washing with-germicidal detergent. With floor materials such as asphalt tile, rubber, vinyl, linoleum, mastic, cork, and wood, neglect will permit traffic to cut through finish and sealer resulting in an accelerated rate of wear necessitating extensive repairs. In general, floors should be maintained in accordance with manufacturers' instructions. Another source of information on modern sanitary floor maintenance is the manufacturer of floor care products.

B. The largest area for bacterial accumulation is the floor, whether it is in the operating room, ward or corridor. Floor care must be modern and efficient, not haphazard. The ordinary mop and pail technique, with any available soap is completely inadequate. With poor mopping techniques, bacterial counts actually increase as the floor washing progresses.

C. The use of the floor-flooding wet pickup technique where applicable, has proven to be effective in reducing bacterial counts. The most effective agents for floor-floodings are the synthetic phenolics, ,iodofors, and the quaternary ammonium compounds. All of these can, without difficulty, lower bacterial counts on hospital floors to single digits per square centimeter. For example: One modern city hospital has established a standard of practical value for floors in the operating suite at 5 or fewer organisms per square centimeter and for ward floors,. 10 or fewer organisms per square centimeter. After a satisfactory floor maintenance and bacteria control technique is developed, counts should be made frequently enough to assure that acceptable standards are maintained.

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D. Despite careful cleaning in one city hospital operating room, high bacterial counts were persistent. Investigation disclosed that the operating table was bolted down and it was impossible to clean under it. The table was moved and all sorts of debris was found floating in 8 green slime. After the floor was thoroughly cleaned and instructions issued for moving the-table each time the floor was flooded, the counts were lowered to prescribed standards.

E. Division of Indian Health hospitals should adhere to these procedures.

With the wide variety of floor materials in use it is important to know characteristics and proper care of each kind of floor. Leading manufacturers of floor finishes furnish a chart for this purpose and information is as follows:

FLOOR MATERIALS	SPECIAL PRECAUTIONS	RECOMMENDED FLOOR CARE
Asphalt tile	Avoid oils and solvents.	1. Polymer-type water emulsion finish. 2. Wax-type water emulsion finish. 3. Germicidal detergent.
Rubber	Avoid oils and solvents.	1. Polymer-type water emulsion finish. 2. Wax-type water emulsion finish. 3. Germicidal detergent.
Vinyl	Will scratch. Requires wax or floor finish for protection.	1. Polymer-type water emulsion finish. 2. Wax-type water emulsion 3. Solvent cleaning and polishing wax. 4. Germicidal detergent.
Linoleum	Avoid unsafe cleaners, varnish, or lacquer sealing compounds.	1. Polymer-type water emulsion finish. 2. Wax-type water emulsion finish. 3. Solvent cleaning and polishing wax, 4. Water emulsion concrete sealer, 5. Germicidal detergent.

FLOORMATERIAL	SPECIAL PRECAUTIONS	RECOMMENDED. FLOOR CARE
Mastic	Avoid oils and solvents.	1. Polymer-type water emulsion finish, 2. Wax-type water emulsion finish. 3. Germicidal detergent.
Cork	Avoid excessive use of water.	1, Penetrating floor sealer. 2. Solvent cleaning and polishing wax.
Wood	1. Be sure floor is properly sealed. 2. Avoid excessive use of water. 3. Avoid unsafe cleaners.	1. Penetrating floor sealer. 2. Special water repellant finish. 3. Solvent cleaning and polishing wax. 4. Polymer or wax-type water emulsion finish (on well-sealed floors only). 5. Germicidal detergent (on well-sealed floors only).
Terrazzo	l. Avoid unsafe cleaners that will eat concrete matrix away from marble chips. 2. Seal to prevent dusting and stains. 3. Avoid acids.	1. Solvent-type terrazzo sealer finish. 2. Polymer or wax-type water emulsion finish (on cured and neutralized floors only). 3. Solvent cleaning polishing wax. 4. Germicidal detergent.
Concrete	1. Seal to prevent dusting. 2. Avoid unsafe cleaners and acids.	1. Water emulsion concrete sealer-finish. 2. Solvent-type penetrating floor sealer.(on cured and neutralized floors only). 3. Polymer or wax-type water emulsion finish (on cured and neutralized floors only). 4. Solvent cleaning and polishing wax. 5. Germicidal detergent.

FLOORMATERIALS ,	SPECIAL PRECUATIONS	FLOOR CARE
Tile (clay and ceramic)	Avoid unsafe cleaners that will eat away concrete grouting.	1. Solvent-type terrazzo sealer finish. 2. Polymer or wax-type water emulsion finish (on cured and neutralized floors only). 3. Solvent cleaning and polishing wax. 4. Germicidal detergent.
Marble	1. Avoid stains, oils, grease, and dyes. 2: Avoid cleaners that leave soap buildup.	1. Solvent-type terrazzo sealer-finish. 2. Germicidal detergent.
Magnesite	1. Avoid unsafe cleaners. 2. Seal to prevent dusting.	1. Water emulsion concrete sealer-finish. 2. Polymer or wax-type water emulsion finish. (on cured and neutralized floors only). 3. Solvent cleaning and polishing wax. 4. Germicidal detergent.

3. PROCEDURES.

A. Cleaning the Floor.

(1) Stripping Old Finishes and Dirt. Prior to using a polymer-type water emulsion finish, it is essential that all old wax, resin-type finishes, dirt and cleaner deposits be removed from the floor. Polymer-type films will not adhere unless the floor is absolutely clean. Prior to using a wax-type water emulsion finish it is not necessary to remove all wax, but it is essential to remove all dirt and all wax that is embedded with dirt.

(2) Step-by-Step Procedure.

(a) Remove all possible obstructions such as desks, chairs, tables, waste baskets, etc.

(b) Clean area with vacuum or damp mop.

(c) Remove gum with putty knife.

(d) Put up safety ropes or warning signs.

(4 Add about four ounces of household ammonia to each gallon of liquid germicidal detergent or use special wax remover developed for this purpose.

(0 Apply stripping solution to floor with mop.

63) Allow solution to remain undisturbed 3 to 5 minutes while cleaner loosens all dirt and film. Area should be small enough for complete removal of the solution before it dries.

(h) Best results are obtained if floor is scrubbed. In extreme cases, agitation of the solution with brush or steel wool may be necessary.

(0 Give special attention to removal of dirt in corners, cove bases and baseboards.

(5) Special care should be taken not to spatter baseboards and equipment but if they are they should be wiped and dried immediately,

(k) Pick up dirty scrubbing solution with mop or vacuum pickup.

(1) Rinse thoroughly with clear water.

(4 Pick up rinse water and allow to dry.

B. Finishing the Floor with Water Emulsion Finish.

(1) Step-by-Step Procedure

(a) Have floor clean and ready to apply finish,

(b) Apply an even light coat of water emulsion finish. The amount of finish which should be applied depends on the porosity of the floor. Use a clean mop or applier. Apply to edge of room along baseboards or cove bases first then to remaining floor area. Spread as evenly as possible. Do not rework areas that have started to set up.

(c) Allow to dry thoroughly which requires 20 or 30 minutes.

(d) If a second coat is desired apply as above allowing to dry thoroughly.

(e) No buffing is required but wax-type emulsions . may be buffed for greater luster. Polymer - type emulsion finishes, after becoming worn may be improved in appearance by buffing.

(f) Only those floor finishes classified by the Underwriters. Laboratories, as an anti-slip floor maintenance product, should be used.

C. Routine Maintenance.

(1) When microstat vacuum cleaners are available, use a dusting tool for easiest removal of dirt and dust. A damp mop with germicidal detergent may also be used. Buff if desired

(2) Dry clean heavy-traffic areas with a floor polishing machine using a No, 1 or No, 2 steel wool pad.

(3) When heaviest-travelled areas wear thin; damp mop with germicidal detergent. Rinse and allow to dry. Apply one or two coats of floor finish as required in the heaviest traffic lanes.

(4) Periodic renewal of finish is required depending on traffic conditions, usually once or twice a year. Completely strip the floor as prescribed in Paragraph 3A (Stripping) and recoat as explained in Paragraph 3B (Finishing).

P. Maintenance of Conductive Floors. Except for special waxes and cleaners, which must have safe electric properties, conductive floors are maintained in the same manner as any other floor of the same material. The National Fire Protection Association requires that any waxes, polishes or dressings used for maintenance of conductive floors shall be of an electroconductive type, In order to stay within the safety limits estiblished by N. F. P, A. only those floor ***waxes*** and cleaners which bear the Underwriters Laboratories Reexamination Service may be used. It is essential that everything possible is done to safely maintain conductive floors in proper condondition and insure that wax build-up does not cause conductive resistance to exceed l,OOO,OOO ohms. Electroconductive waxes and cleaners should be stored in easily identified containers and tagged to preclude improper usage. Immediately after floor treatment conductivity tests should be performed to assure safe limits.

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